Table of Contents

Vision 2

Mission 2

Values 2

Key Stakeholders: 2

Overview of ESIP’s Strategic Accomplishments 2009-2013 3

Goal 1: Increase the use and value of Earth science data and information 4

Key Accomplishments 4

FUNding Friday 4

ESIP Testbed Activities 4

Collaboration Area Activities 4

2020 Vision Pillar: ESIP leads the development science data information professionals 5

Funded Activities 5

Key Accomplishments 5

Data Management Short Course 5

ESIP Student Fellows – 5

Goal 2: ~~to facilitating, coordinating and advisory community-led organization~~ to Promote the use of Earth science data and information products for our members and the communities they support 6

Funded Activities 6

Key Accomplishments 6

ESIP Teacher Workshops 6

Ignite@AGU 2011-2013 6

Societal Benefit Collaboration Areas 7

Goal 3: Continue to evolve the ESIP Federation (e.g., governance, structure, staffing) to strengthen the ties between Observations, Research and Applications. 7

Funded Activities 7

Key Accomplishments 7

ESIP Collaboration Infrastructure 7

ESIP Meetings – 8

ESIP Message Development 8

Community Growth 9

Goal 4: Promote techniques to articulate and measure the socioeconomic value and benefit of Earth science data, information and applications. (e.g., feedback to sponsors – value of their investment) ƒ 9

Funded Activities 9

Key Accomplishments 9

Evaluation Workshops at ESIP Winter and Summer Meetings 9

Vision Pillar 2020 ESIP achieves sustainability through diversification, global partnerships and partner recognition. 9

Funded Activities 9

Key Accomplishments 9

Outreach & External Partnerships 9

Agency Specific Collaboration 10

Additional 2011 Strategic Actions not elsewhere: 10

Other Strategic Accomplishments 10

Things Undone 10

# Vision

To lead in promoting the collection, stewardship and use of Earth science data, information and knowledge that is responsive to societal needs.

# Mission

To support the networking and data dissemination needs of our members and the global community by linking the functional sectors of observation, research, application, education and ultimate use of Earth science.

# Values

Agile

Collaborative

Collegial

Community-driven

Innovative

Neutral

Open

Participatory

Voluntary

# Key Stakeholders:

Key audiences fall into three broad categories:

a) Developers of data products and those who create the infrastructure necessary to deliver data products and services

b) Users of products and services

c) Opinion leaders and supporters

The first two groups form the core of the Federation membership.  The second group also includes organizations external to the Federation that benefit from the services of Federation members. The third group includes key organizations and individuals who can influence and support policy or funding decisions that affect the Federation, its members and the Earth science field.

Specifically, the Federation’s primary audiences are:

Developers of Earth science products and/or services:

* Organizations that develop data processing, data analysis and data tools;
* Organizations that create and/or archive and disseminate data products.

Those who use these products or services:

* The Earth science research community;
* Resource planners and/or managers at all levels – local to federal;
* Educational product developers and professional organizations and associations that provide professional development and training for Earth science K-24 educators.

Key influencers:

* National and regional funding sources;
* Federal policy makers and key staff who directly impact Earth science legislation and appropriations.

# Overview of ESIP’s Strategic Accomplishments 2009-2013

The Federation for Earth Science Information Partners’ Strategic Plan 2009-13 recognized the need for ESIP to become a forum for and provide community leadership to several key areas of Earth science data and information management.

The plan identified four main goals:

1. Increase the use and value of Earth science data and information.
2. Act as a facilitating, coordinating and advisory community-led organization to promote the use of Earth science data and information products for our members and the communities they support.
3. Continue to evolve the ESIP Federation (e.g., governance, structure, staffing) to strengthen the ties between Observations, Research and Applications.
4. Promote techniques to articulate and measure the socioeconomic value and benefit of Earth science data, information and applications. (e.g., provide feedback to sponsors to elaboarate the full value of their investment)

In 2011, the ESIP Federation leadership did a mid-course review and added more additional priorities.

* ESIP is a trusted community authority that supports the integration of science and data into mainstream use. (Goals 1 and 2)
* ESIP achieves sustainability through diversification, global partnerships and partner recognition. (called out below)
* ESIP provides the Earth science informatics intellectual commons to drive innovation. (Goal 1 and 3?)
* ESIP leads the development of science data information professionals (called out below)

## Goal 1: Increase the use and value of Earth science data and information

1. NOAA: Facilitate Data Stewardship Activities
2. NASA: Next generation technologies and approaches to spur innovation
   1. Open Source Mini Summit
   2. Science on Drupal Lab
   3. FUNding Friday
   4. Professional Development
3. NOAA: Support NOAA Earth Science Data Management Initiatives
4. NOAA: Increase NOAA’s Efficiency through Innovation and Standards
5. NASA: Grow and Nurture the ESIP Federation Testbed

### Key Accomplishments

#### FUNding Friday

http://wiki.esipfed.org/index.php/Cool\_Creations

#### ESIP Testbed Activities

2010 [Testbed Task 1: Expert Skills Database](http://wiki.esipfed.org/index.php?title=Testbed&oldid=31820#Testbed_Task_1:_Expert_Skills_Database)

2010 [Testbed Task 2: Unique Data Identifiers](http://wiki.esipfed.org/index.php?title=Testbed&oldid=31820#Testbed_Task_2:_Unique_Data_Identifiers)

Resulted in a publication

[2010 Testbed Task 3: Semantic Registration of Data and Services](http://wiki.esipfed.org/index.php?title=Testbed&oldid=31820#Testbed_Task_3:_Semantic_Registration_of_Data_and_Services)

[2010 Testbed Task 4: Application-Specific Portals](http://wiki.esipfed.org/index.php?title=Testbed&oldid=31820#Testbed_Task_4:_Application-Specific_Portals)

2012 Testbed Portal

2012 Discovery Services and Clients

2012 Data and information Quality

2012 Re-usable Metadata Editor

2012 Data Stewardship

2013 Cloud Computing Adoption Advisory Tool

2013 ESIP Semantic Portal

2013 Collaboration Discovery, A Linked Data Approach

testbed.esipfed.org

#### Collaboration Area Activities

Data Stewardship

* Data Citation Guidelines adopted by ESIP Assembly in 2012 and reused by AGU, GEO, USGS, NSF, NASA and NOAA
* Data Stewardship Principles adopted by Assembly in 2012

Data Study – Panel at Summer Meeting 2013. Articles in Eos

Discovery – OpenSearch conventions adopted by several groups. Discovery Testbed project with Geoportal.

Documentation/CF – Adopted the governance responsibilities of Attributes for Data Discovery (ACDD)

Information Quality – Summer Meeting 2011 Theme focused on this

IT&I – Regular Rants/Raves; Created Interoperapedia and posted to ESIP Commons: http://commons.esipfed.org/interoperapedia

Cloud Computing – Cloud cost testbed tool; Workshops at Summer Meetings

Drupal – Drupal Labs at Summer Meeting; Regular telecons with experts

Semantic Web – Testbed projects;

Products & Services – Oversaw Testbed projects. Created the Testbed Review Board.

NASA: Host NASA ESDSWG Activities at ESIP meetings – ESDSWG groups use the ESIP meetings as important face-time to further their work.

## 2020 Vision Pillar: ESIP leads the development of ­­­science data information professionals

### Funded Activities

1. NOAA: Partner with NOAA to Develop Scientific Data Stewardship Short Course
2. 2011 Midcourse: Develop Data Management Training Course (see Goal #1)

### Key Accomplishments

#### Data Management Short Course

* Deployed data management short course of 35 peer-reviewed modules
* 12 ESIP members authored at least one course module
* 3 AGU Data Management Workshops given
* Additional workshops at AMS, Association of Polar Early Career Scientist, IPY Conference and virtual webinars

#### ESIP Student Fellows –

Started the program in 2011 and have had 20+ students move through the program in three classes.

## Goal 2: ~~to facilitating, coordinating and advisory community-led organization~~ to Promote the use of Earth science data and information products for our members and the communities they support

### Funded Activities

1. NOAA: Partner with External Organizations to Deliver Education Workshops
2. NASA: Improving Environmental Stewardship through Earth Observation and Science
   1. Community Engagement for Disaster Response
   2. Ignite@AGU
      1. Hosted Ignite@AGU in 2011, 2012, 2013
3. NASA: Engaging Students and Teachers to Educate Future Scientist, Engineers and Educators
   1. ESIP Summer Teacher Workshop

### Key Accomplishments

#### ESIP Teacher Workshops

In cooperation with the Cooperative Institute for Meteorological and Satellite Studies at the University of Wisconsin, annual teacher workshops were held during the summer ESIP Federation meetings. The workshops were distributed geographically (Knoxville, Tennessee, Santa Fe, New Mexico, Madison, Wisconsin, Chapel Hill, NC) and trained approximately 120 teachers to utilize climate education resources in their classrooms.

In 2011, the Foundation worked with Sally Ride Science to administer a successful 2-day teacher workshop at NASA’s Jet Propulsion Laboratory. Several presenters from the ESIP Federation community were tapped to present educational resources that were developed by ESIP partners.

#### Ignite@AGU 2011-2013

NASA’s Applied Sciences Program – in partnership with AGU's Earth and Space Science Informatics (ESSI) group and the ESIP Federation –co-sponsored Ignite@AGU at the Fall AGU meeting. Ignite (www.igniteshow.com), a concept created by O’Reilly Media, provides presenters a strict presentation format - five minutes and 20 slides that auto-advance every 15 seconds - to make their point: “Enlighten us, but make it quick!”

* 2011, 17 presentations, 120 attendees; http://igniteshow.com/events/igniteagu-2011
* 2012, 11 presentations, 200 attendees http://esipfed.org/node/899
* 2013, 12 presentations, 200+ addendees http://esipfed.org/IgniteAGU2013

This spurred Ignite@Oceans <http://igniteshow.com/events/ignite-oceans-12>

#### Societal Benefit Collaboration Areas

* Energy and Climate – Decision Support Tool Catalog and Summer Meeting sessions
* Air Quality – Air Quality Community of Practice Data Catalog; Outreach to GEO and supporting the GEO AQ CoP
* Newly formed – Disaster Response, Agriculture and Climate

## Goal 3: Continue to evolve the ESIP Federation (e.g., governance, structure, staffing) to strengthen the ties between Observations, Research and Applications.

### Funded Activities

1. NOAA: Preserve ESIP Federation Forum for Collaboration, Knowledge Exchange, Community-Generated Best Practices and Broad-Based Data, Technology and Science Expertise
2. NASA: Coordination approach
   1. ESIP Collaboration Infrastructure
   2. Virtual Collaboration spaces
   3. ESIP Meetings
3. NOAA: ESIP Federation Platform (Web, governance, meetings/events, testbed)
4. NASA: Host ESIP Federation Collaboration Area Meetings
5. NASA: Engaging Students and Teachers to Educate Future Scientists, Engineers and Educators
   1. Student Fellows
6. NOAA: Facilitate Cross-community Engagement
7. 2011 Midcourse: Develop Key ESIP Messages
8. 2011 Midcourse: Develop Collaboration Platform for Knowledge Exchange, Preservation and Reuse

### Key Accomplishments

#### ESIP Collaboration Infrastructure

* ESIP Wiki – no major work was done on the ESIP wiki.
* ESIP Commons - The ESIP Commons was launched in 2012. ESIP meeting sessions and posters have been captured since that time. Interoperapedia was added to the Commons and documents that were adopted by the Assembly like Data Citation guidelines reside there.
* In 2013, the ESIP logins were combined across Wiki and Drupal sites.
* ESIP WebEx – In 2011 we migrated to WebEx for virtual meetings to support real-time collaboration.

#### ESIP Meetings –

The ESIP Federation has generated robust participation in its semi-annual meetings during the past three years. During this time, the Foundation has expanded its remote meeting capabilities. ESIP Federation meetings routinely exceed 200 participants, and approximately 30 others participate remotely during each meeting.

* Winter Meetings in DC
  + 2009 – no theme
  + 2010 - Environmental Decision Making
  + 2011 - Evaluating and Maximizing the Impact of Earth Science Information.
  + 2012 - Connections Through Collaboration: Engaging Community Throughout the Data Life Cycle
  + 2013 – ESIP Advancing Earth Science Information: From Climate Assessment to Intelligence to Action
* Summer Meetings in
  + 2009, Santa Barbara – no theme
  + 2010, Knoxville - Energy and Climate
  + 2011, Santa Fe - Data and Information Quality
  + 2012, Madison - ESIP Community Leadership: Innovation throughout the Data Life Cycle.
  + 2013, Chapel Hill - Building the Value Chain for Earth Science Data and Information in Disaster Planning, Response, Management and Awareness
* Over the last five years attendance at the meetings has increased. In 2009 the Winter Meeting had 110 people and the Summer Meeting had 162. Currently, we are steady at both meetings with around 200-220 people.

#### ESIP Message Development

* “ESIP 101” was developed in 2011 to explain ESIP and has been given at ESIP meetings and as needed to interested groups.
* “About ESIP” 1-pager was developed and distributed to new and prospective members.
* Continued to evolve language on website, through two updates of the website, ESIP language has continued to evolve to match our evolving understanding.
* Launched and maintained the “Monday Update” email to deliver key info about ESIP and around the ESIP Federation.
* Began using social media channels like Facebook and Twitter

#### Community Growth

* 50 New ESIP members between 2009-2013
* 555 Twitter followers and 100 Facebook Followers
* 950+ members of the Monday Update

## Goal 4: Promote techniques to articulate and measure the socioeconomic value and benefit of Earth science data, information and applications. (e.g., feedback to sponsors – value of their investment) ƒ

### Funded Activities

1. NASA: Host Evaluation and Communications Workshops

### Key Accomplishments

#### Evaluation Workshops at ESIP Winter and Summer Meetings

* January 2012
* July 2011

## Vision Pillar 2020 ESIP achieves sustainability through diversification, global partnerships and partner recognition.

### Funded Activities

1. NOAA: Conduct Outreach to Existing and Potential User Communities to better understand Stakeholder Data and Information Needs

### Key Accomplishments

#### Outreach & External Partnerships

The Foundation has participated in or connected with the following organizations during the life of this award: USGCRP, OSTP, USGEO, AGU, CENDI, International Climate Services Partnership, Environmental Evaluators Network, Ecological Society of America, Geological Society of America, Quality Assurance for Earth Observations (QA4EO)/CEOS, IOOS/OCEANS12 Conference and DELSA.

The Foundation has been invited to provide guidance to networks that are organizing communities to work on shared data management practices: NSF GeoData Workshop, CoastalZone 2011 (NOAA Coastal Services Center), Environmental Information Management (EIM) conference, EPA's Apps for the Environment event

#### Agency Specific Collaboration

The Foundation has been working through agency-specific initiatives – NOAA’s Environmental Data Management conference and virtual workshops, NASA’s Earth Science Data Systems Working Groups, NSF’s EarthCube, USGS’ Community for Data Integration and OSTP National Climate Assessment and “Big Data” initiatives – that would help align best practices both internally and across federal agencies. USDA, EPA, USAID and DOE are also at early stages of engagement.

##### EarthCube - Foundation staff has been key contributors to NSF’s EarthCube intiative, particularly in the area of governance evolution and community support. Foundation staff has participated on a number of awarded EarthCube proposals,. ESIP Federation members are also actively contributing to EarthCube and are helping to link EarthCube activities back to ESIP Federation community efforts by co-locating meetings, sharing resources and joining forces.

## Additional 2011 Strategic Actions not described elsewhere:

* Re-Energize and Expand Membership Strategically
* Diversify Revenue Streams – Between 2009 and 2013, the ESIP Federation had small funding come from Esri and Renci to sponsor parts of the ESIP meeting.

## Other Strategic Accomplishments

* 50 new member organizations between 2009-2013
* Website Traffic 500,000 views and 100,000 unique visitors over last 5 years.
* Hybrid component to in-person meetings
* New volunteer recognition – ESIP Award and President’s Award

## Things Undone

* Produce year-end reports
* Evaluate activities
* Re-Energize and Expand Membership Strategically
* Diversify Revenue Streams
* Metrics (Goal 4)